

New Views of the Near-Sun Solar Wind: Radio Occultation Measurements

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The detection of coronal streamers in Doppler scintillation measurements (Woo et al., ApJ, 449, L91, 1995) marked an important shift in the interpretation of radio occultation measurements. This new perspective — that variations in radio occultation measurements near the Sun can be caused by quasi-stationary raylike structures as well as turbulence convected along with the solar wind — has led to an improved understanding of the global morphology of coronal structures from radio occultation measurements, and their relationship to features in coronal and *in situ* solar wind measurements.

In this paper we will present measurements of Doppler scintillation made with the Galileo S-band radio signal since 1992 to demonstrate the solar cycle dependence of small-scale raylike structures observed near the Sun.

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In this paper, we present Doppler scintillation measurements made with the Galileo S-band (13 cm wavelength) radio signal since 1992 to demonstrate the solar cycle dependence of small-scale raylike structures near the Sun.